

FIG. 1
Challenge dose 10^8 CFU

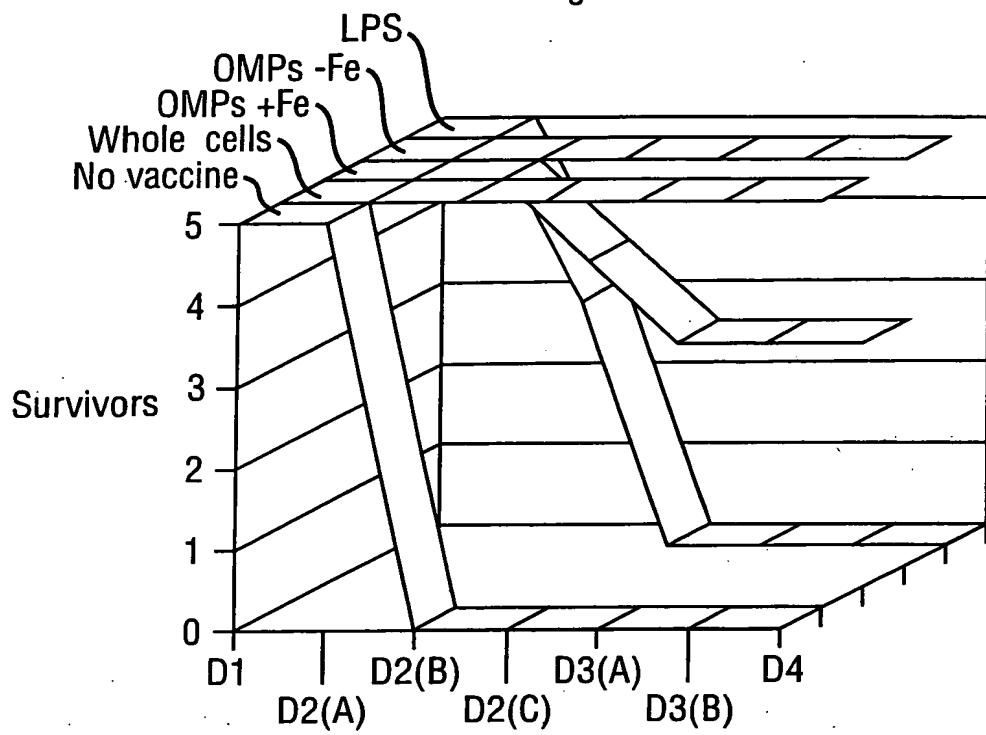
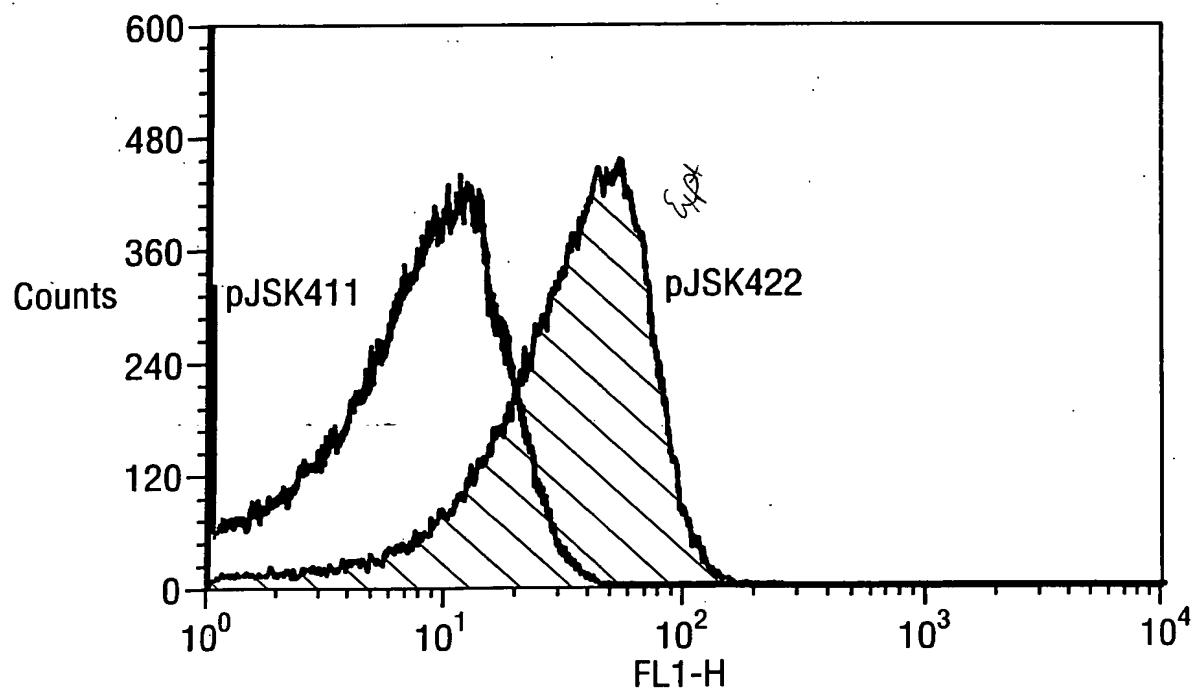


FIG. 6



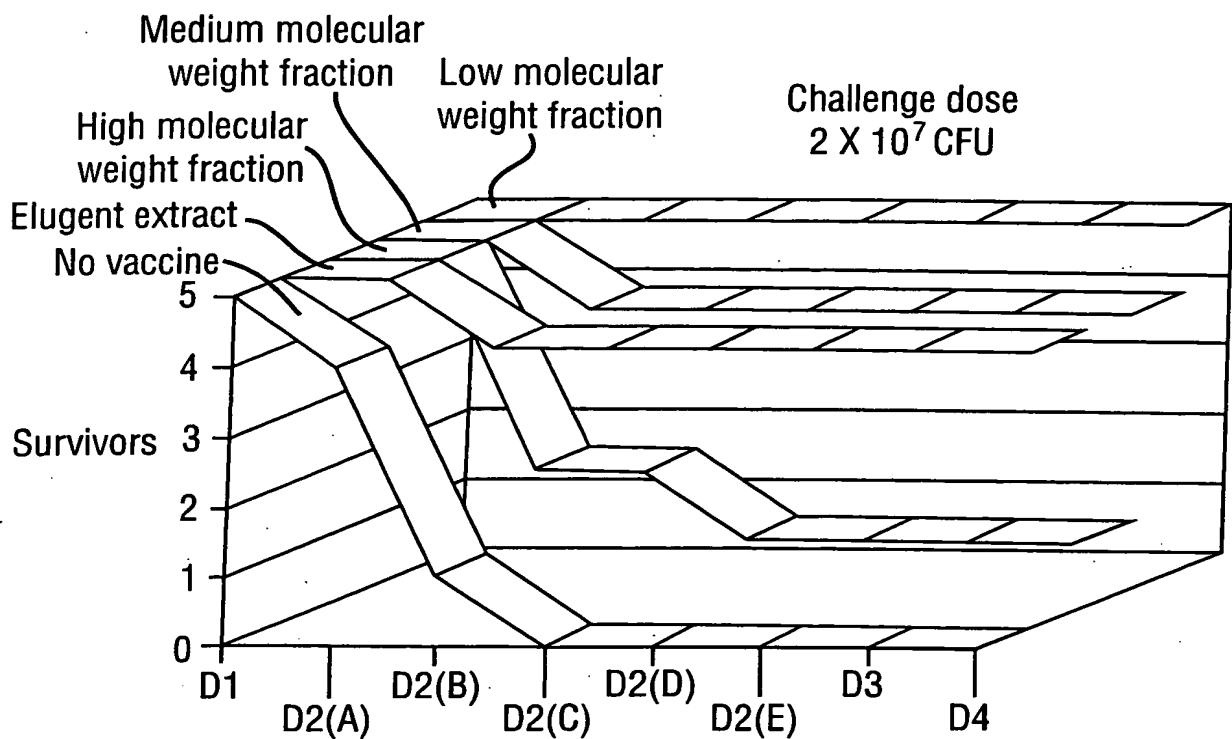


FIG. 2A

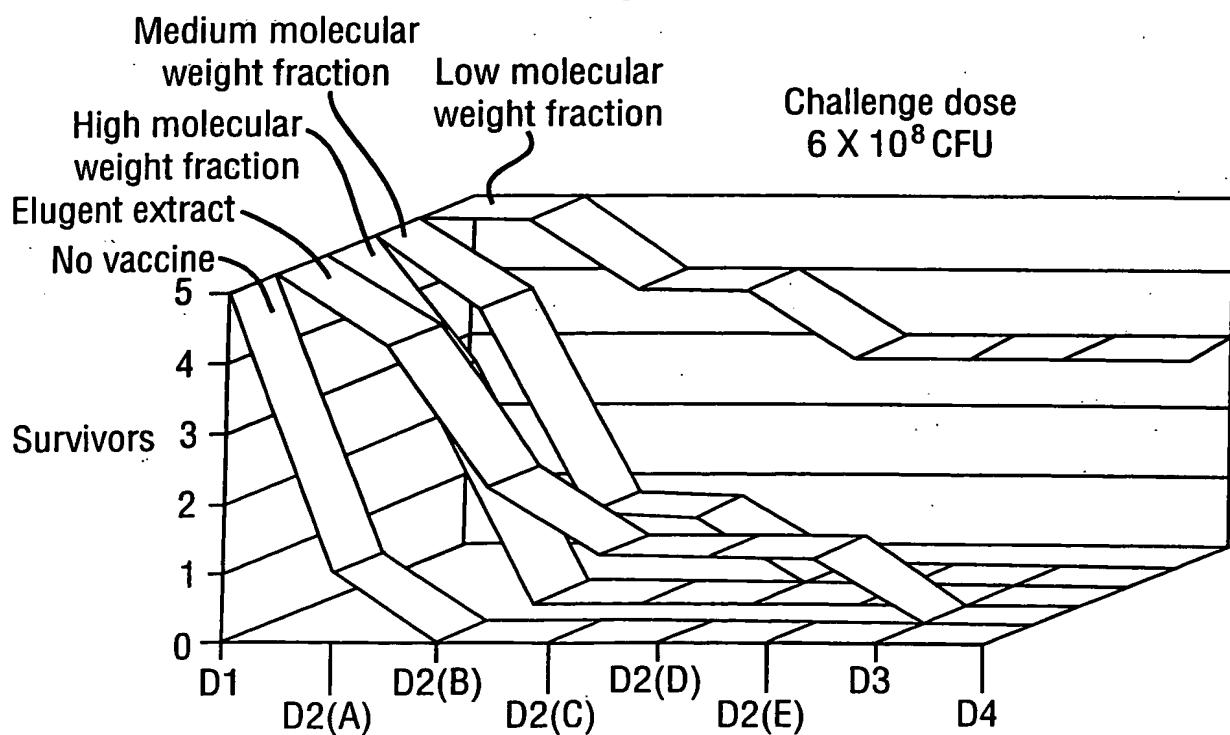
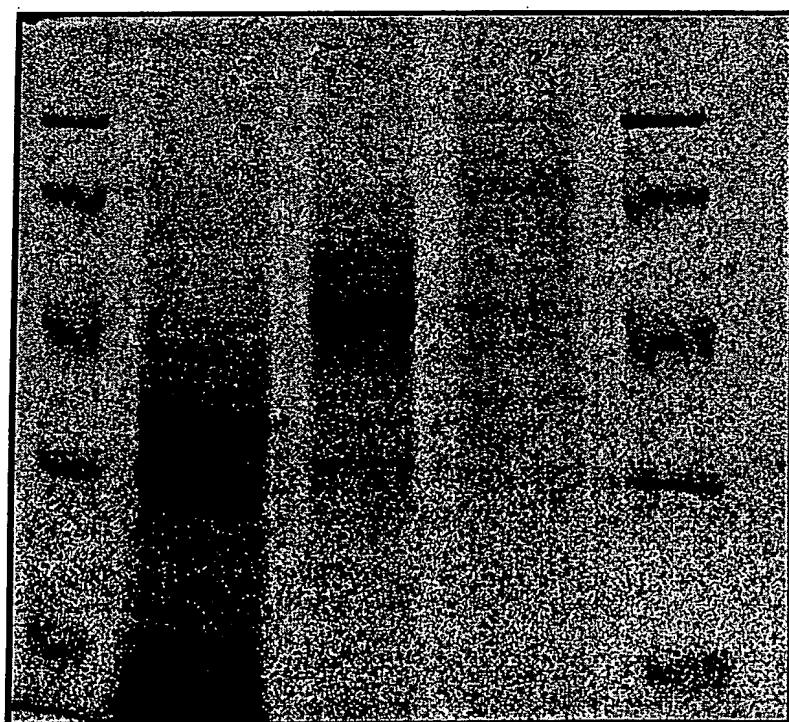


FIG. 2B

LOW MEDIUM HIGH



Molecular weight kDa

94

67

43

30

20

FIG. 3

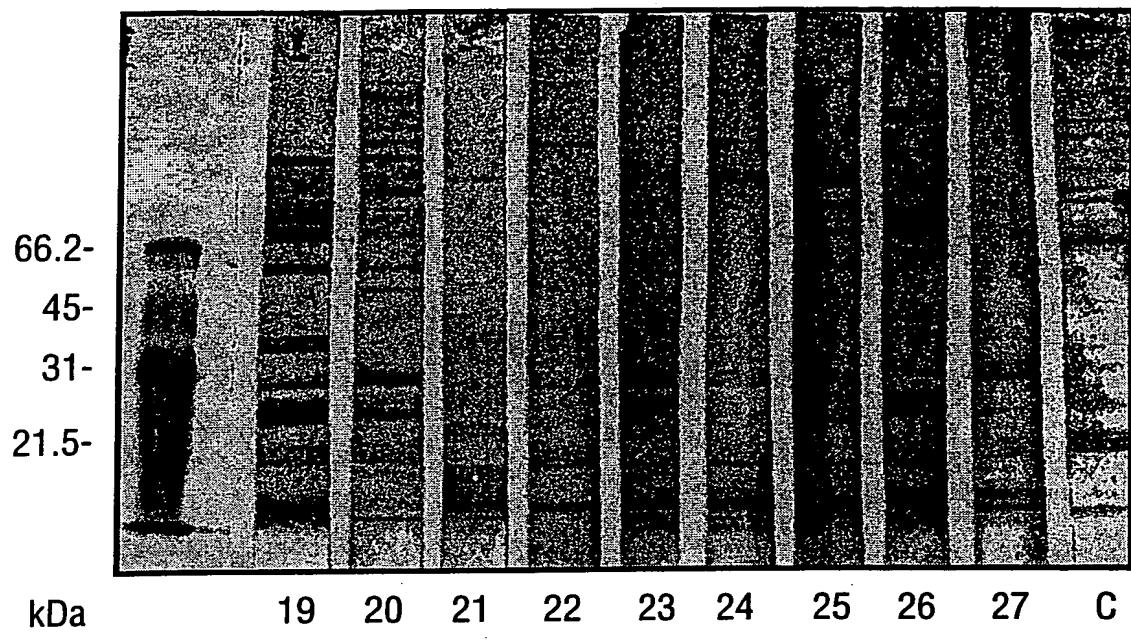
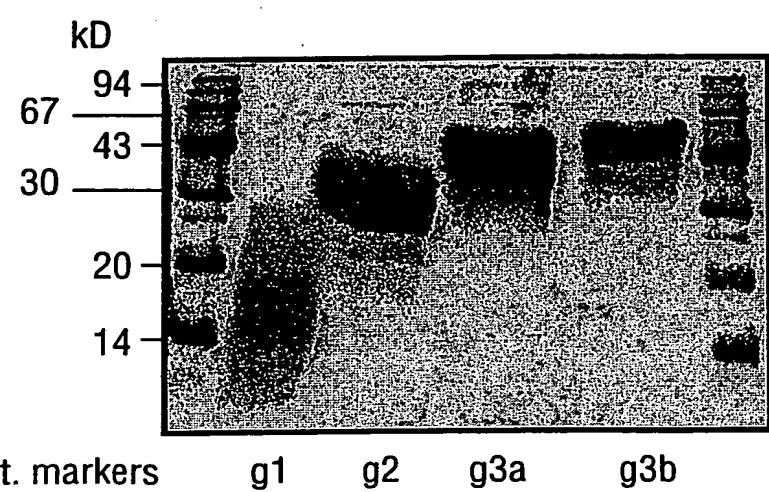


FIG. 4



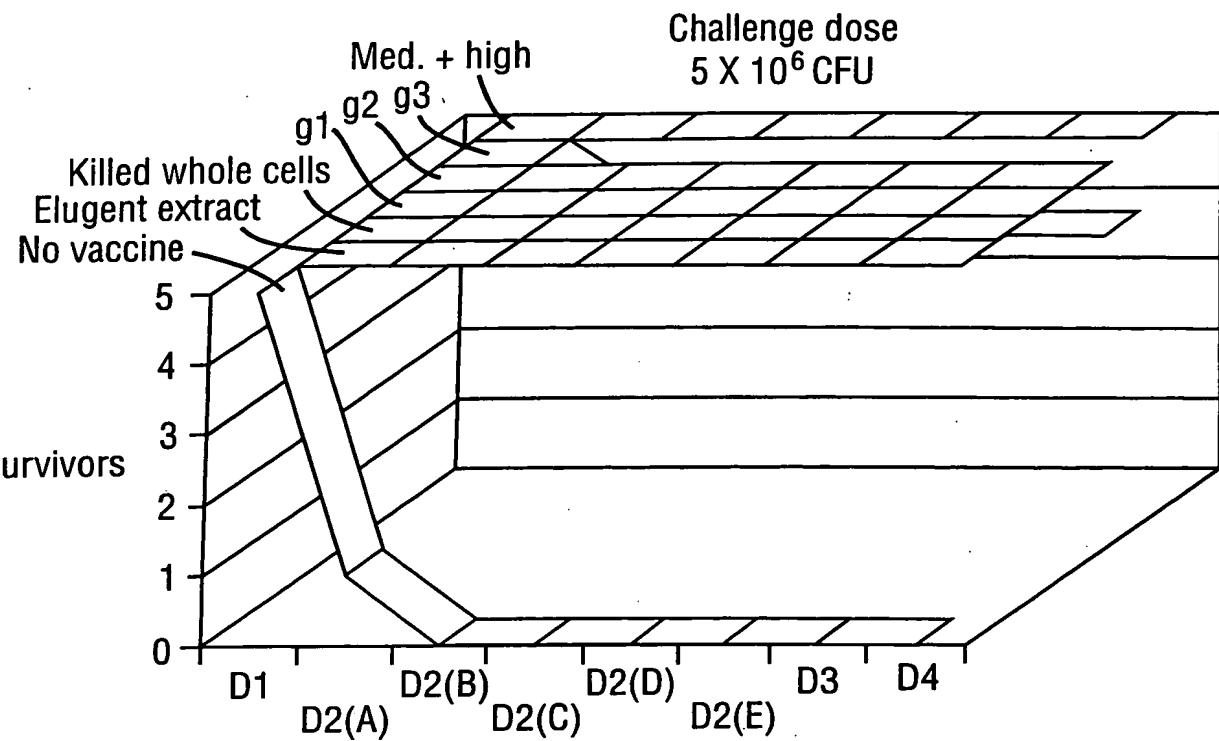


FIG. 5

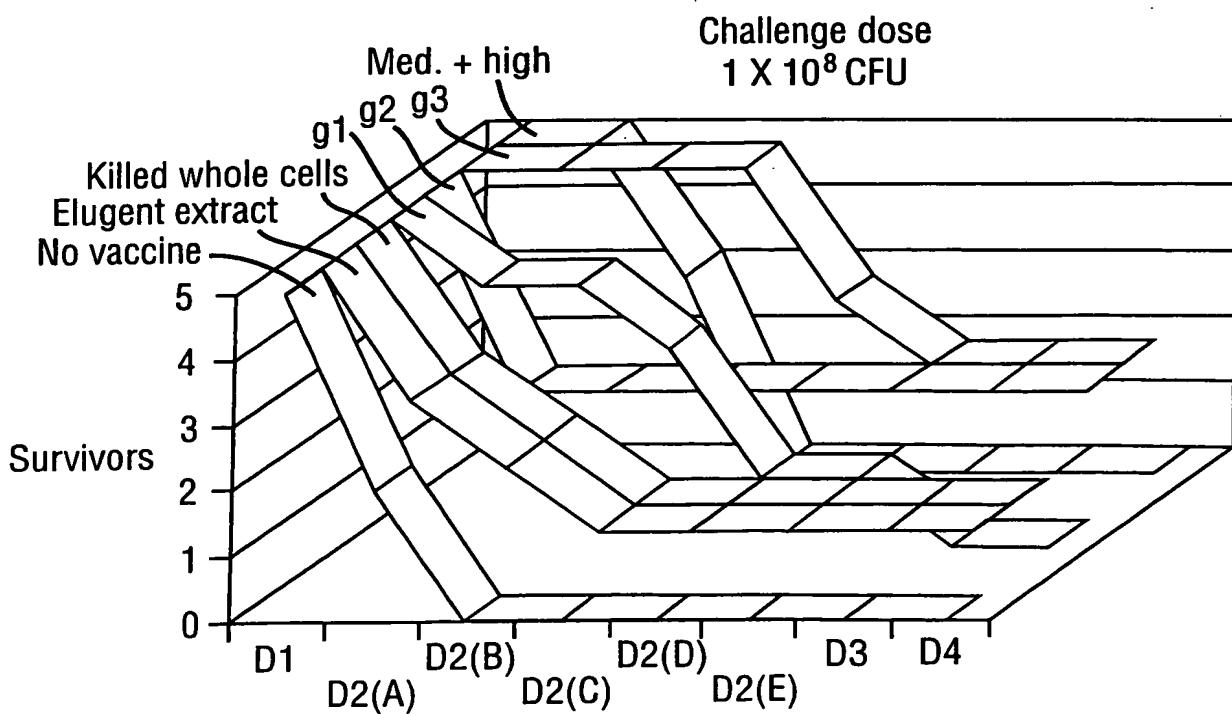


Fig. 7

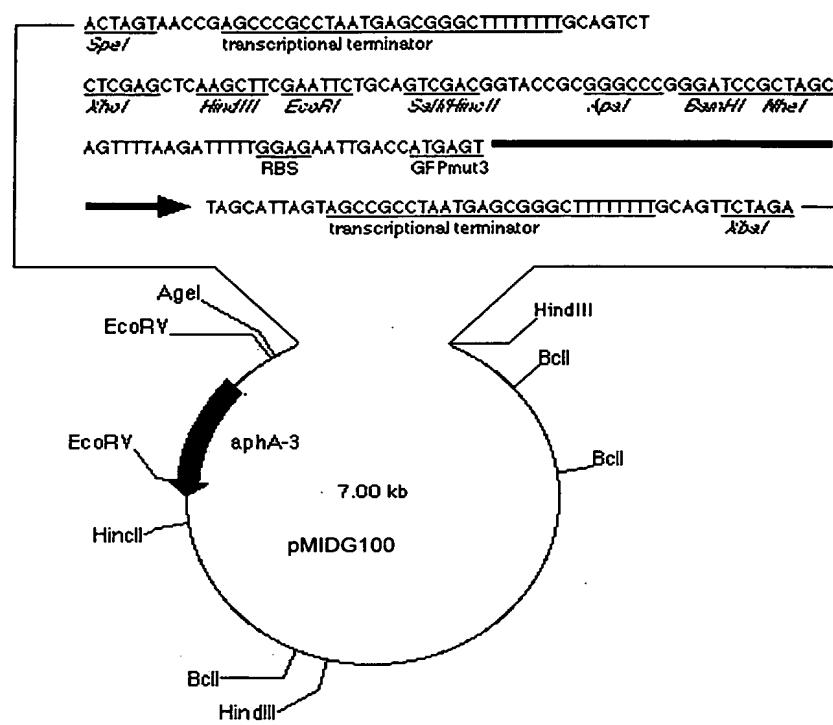
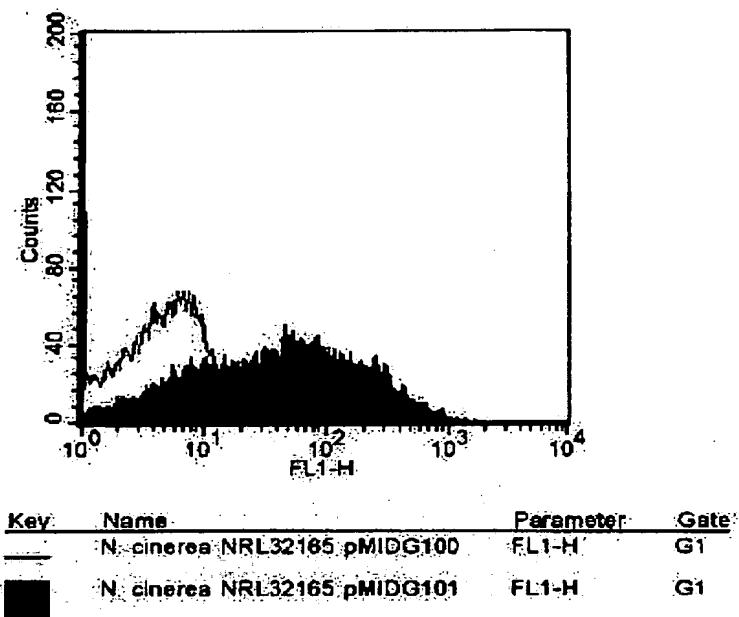


Fig. 8

(A)



(B)

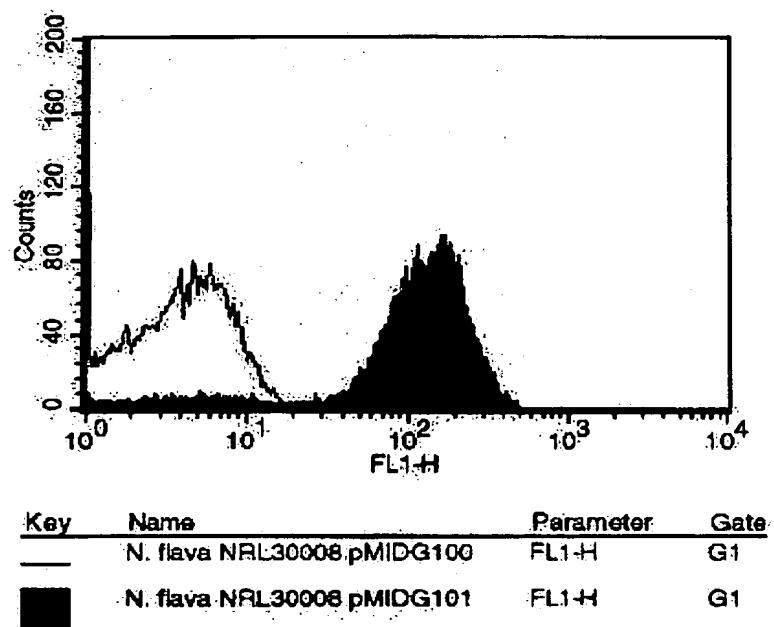
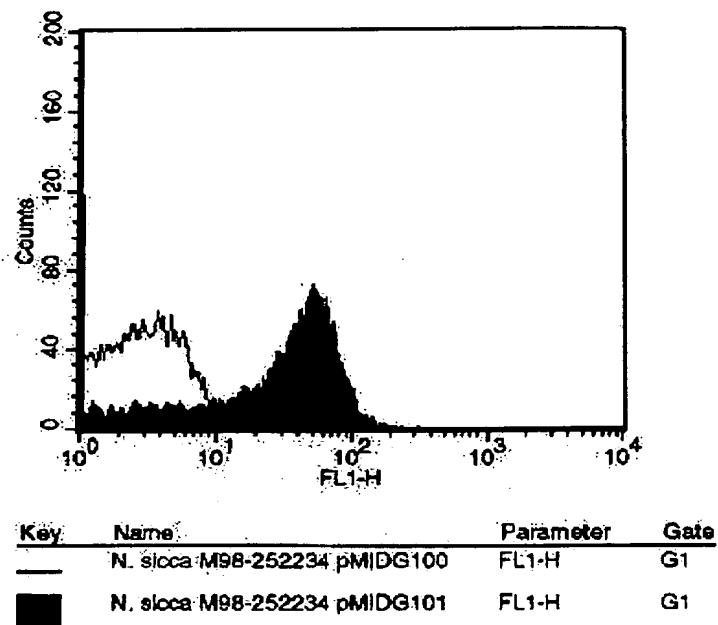


Fig. 8 (continued)

(C)



(D)

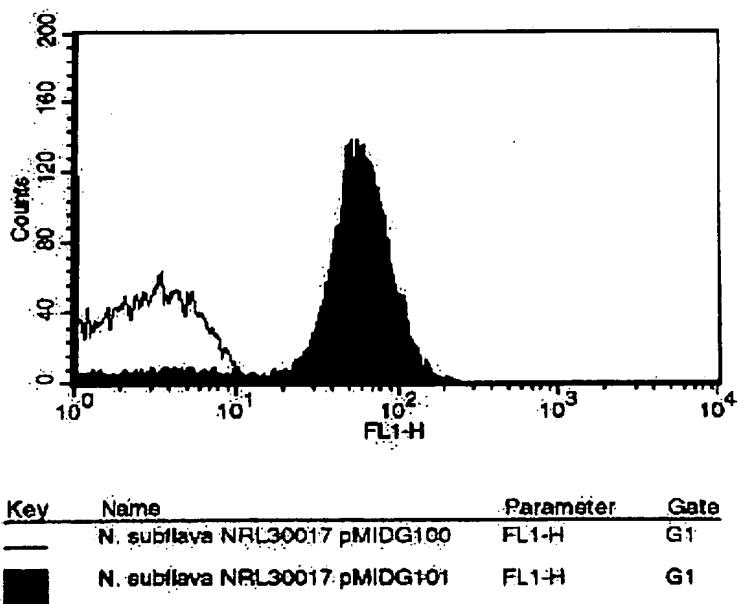


Fig. 8 (continued)

(E)

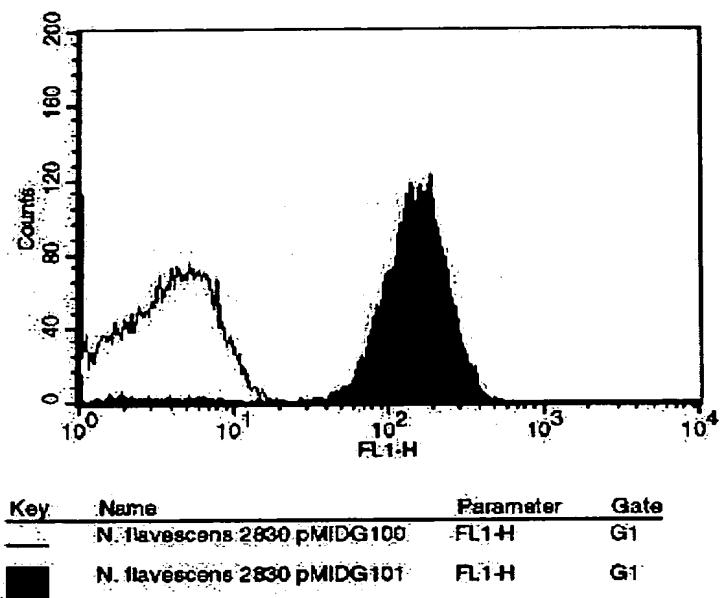
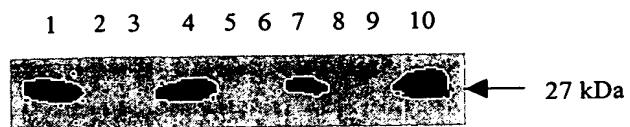


Fig. 9

(A)



(B)



Fig. 10

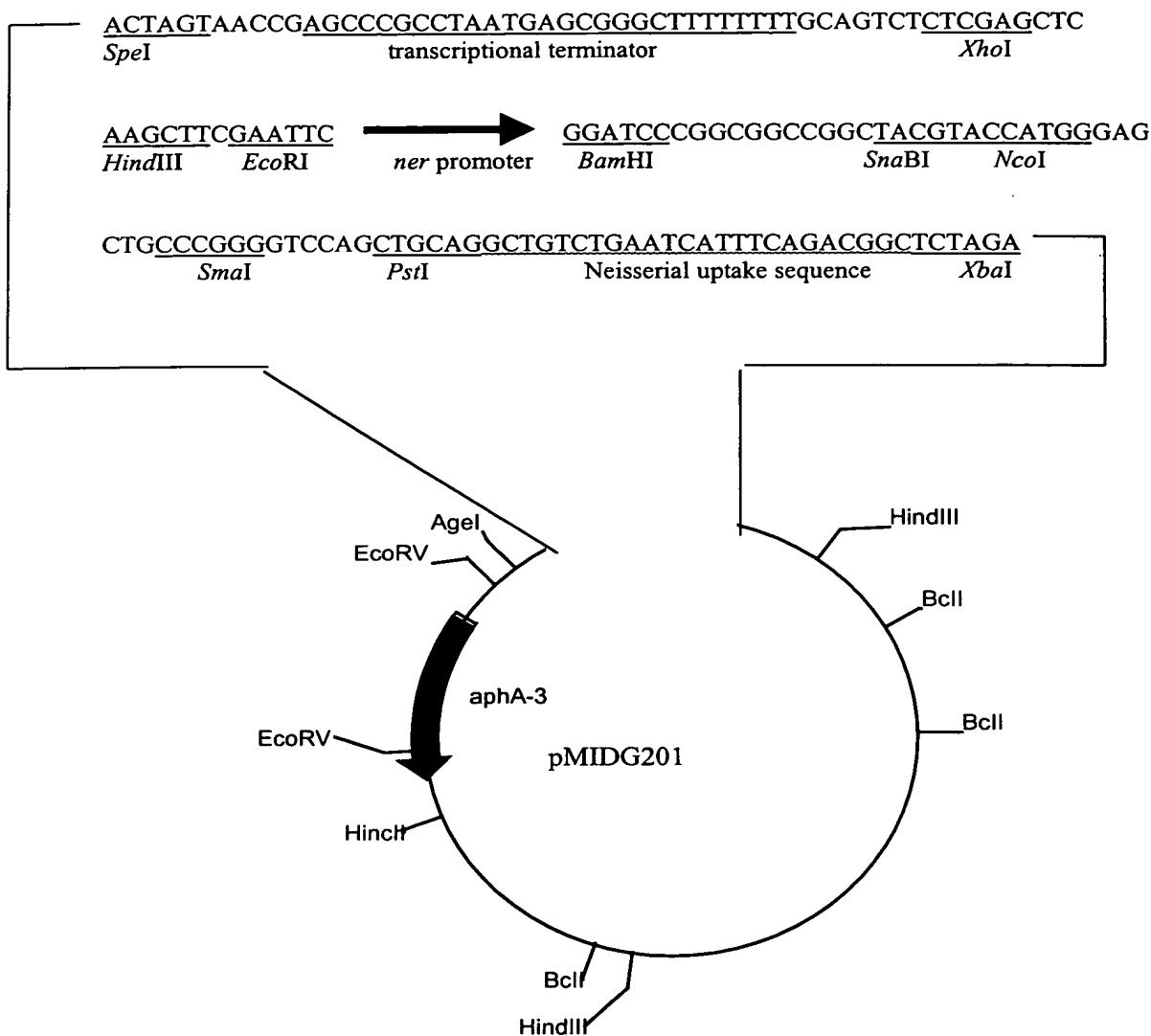
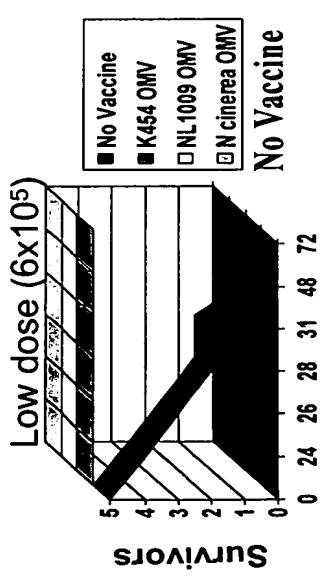


Fig. 11

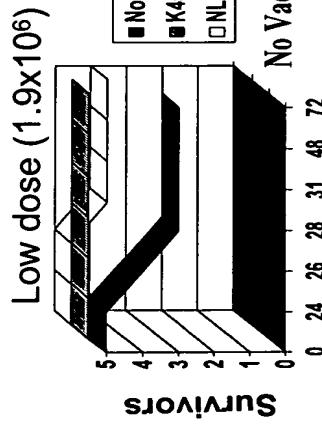
NcoI - tgaccataaaggAACccaaatatgaaaaAGCacttgccacactgtggccctcgctccggccggccactggcggaaaggcgcatccctta
RBS Start codon
cgtccaaggcgatggccacacgcaaaagccctcaagctttaggttctgcaaaggctcagccgcgcatccgcaggctaccgcataacgacccctccgttcgcgt
cgattacacgcgctacaaaaactataaagccccatccaccgattcaactttacgatcatggcgctccgcattacgacttcgacacccaaatgcggcgtaaaaccgtatct
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ccccgaatgtcgatttggatgcccgtaccgcataactacatcgccaaagtcaacactgtcaaaaacgtccgttcggcgaaactgtccgtccggcggtgcgcgtcaaaattctga
tatgcgccttattctgcaaaaccgcgcagccctggcggttttgtttct - PstI
Stop codon Transcription terminator

Fig. 12 *N. lactamica* OMVs protect mice against challenge by diverse meningococcal strains

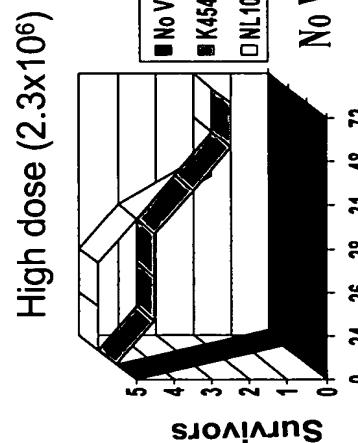
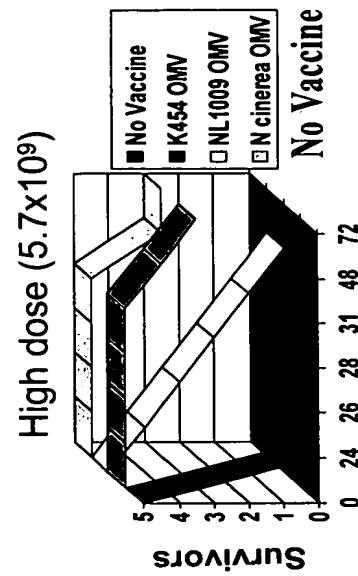
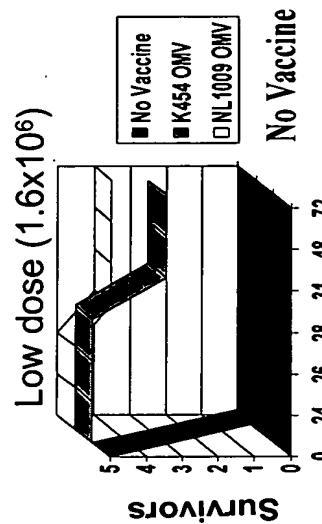
K454 B15:P1.7,16 (ET5)



Z4673 B (Lineage 3)



Z8948 C2a:P1.5,2 (ET37)



h post infection

h post infection

h post infection

h post infection

Fig 12 continued

NZ 394/98 B4:P1.6 (Lineage 3)

Z4662 B2b:P1.2 (A4)

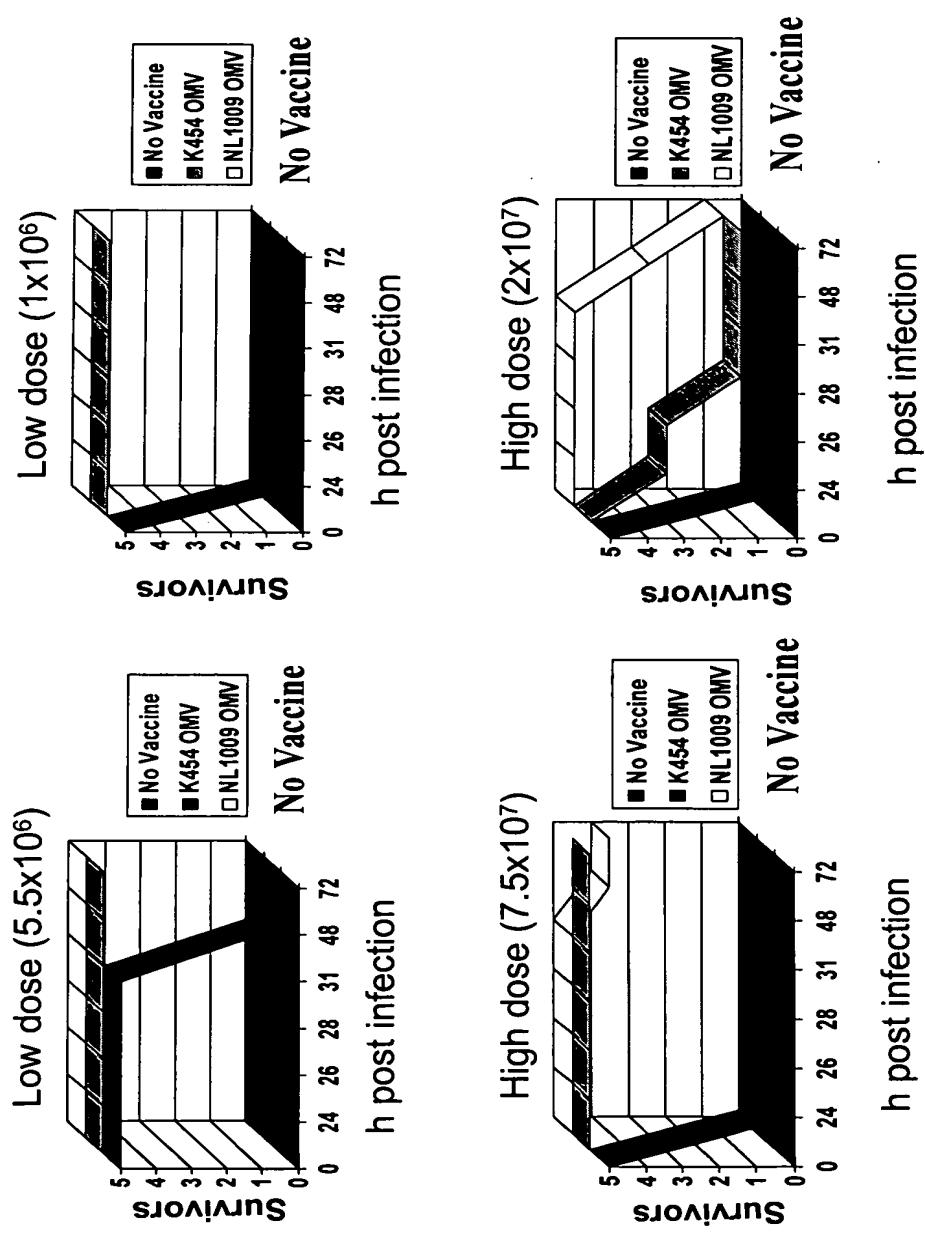


Fig. 13 *Neisseria lactamica* OMVs and low MW protein pool protect mice against meningococcal challenge

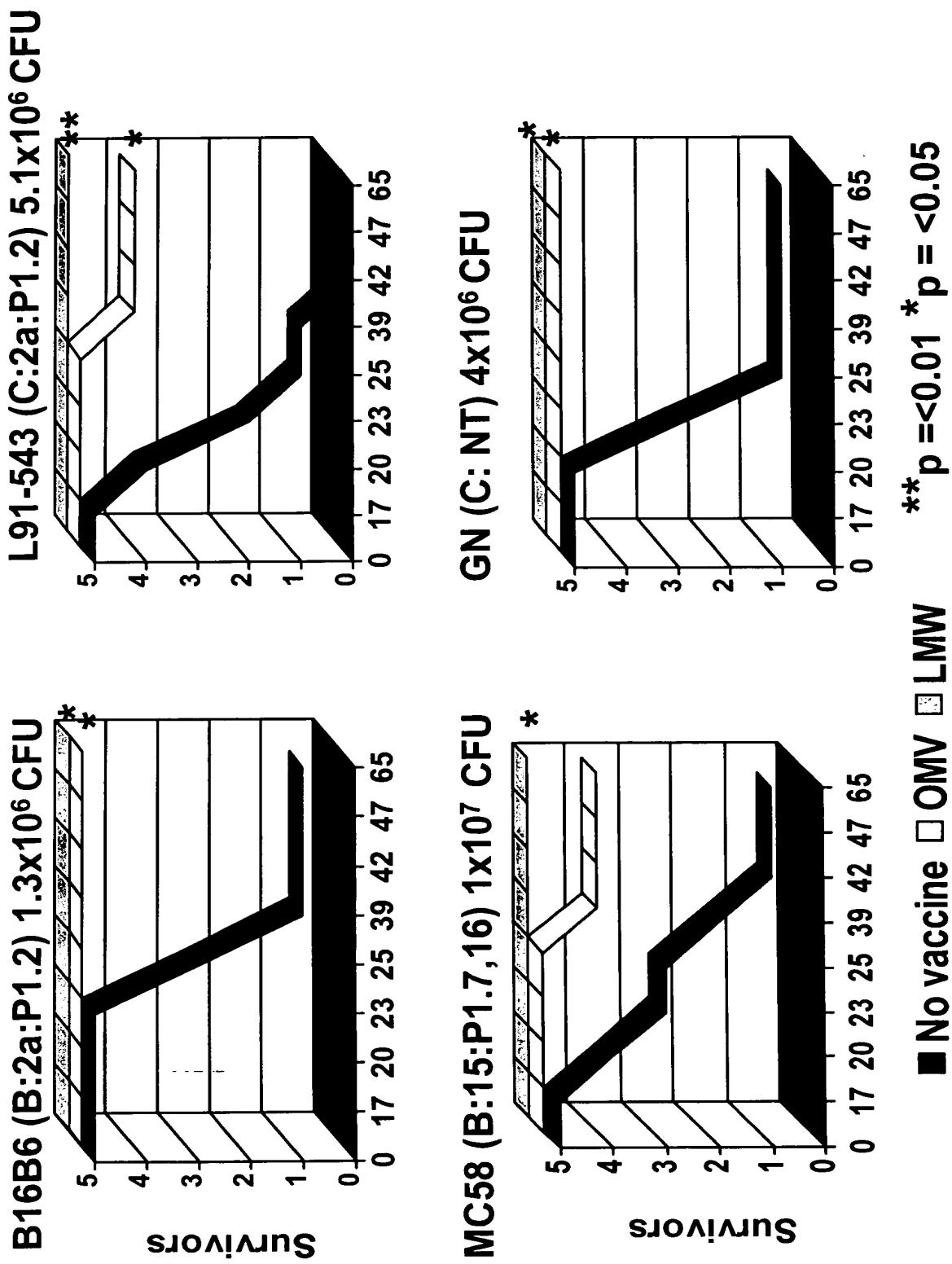


Fig. 14. *N. lactamica* OMVs with Freund's or alum adjuvant protect mice against serogroup B meningococcal challenge (isolate K454)

